We claim:

1. A method for processing multimedia data in a User Datagram Protocol (UDP) layer of a wireless receiver conforming to an Internet Protocol (IP) standard, said method comprising the steps of:

receiving error information with said multimedia data from a Radio Link Protocol (RLP) layer; and

forwarding said error information with said multimedia data to a higher layer.

2. The method of claim 1, wherein said error information comprises a set of logical transmission unit (LTU) error indicators associated with each packet.

3. The method of claim 2, wherein said error indicators point to a starting and ending location of erroneous data.

4. The method of claim 1, further comprising the step of performing a packet header cyclic redundancy check (CRC).

5. The method of claim 4, further comprising the step of forwarding said error indicator, logical transmission unit (LTU) size and a packet payload to the FEC decoder if said packet header is valid.

6. The method of claim 4, further comprising the step of forwarding said error indicator and a packet payload to the FEC decoder if said packet header is valid.

7. The method of claim 1, further comprising the step of processing said error information to identify an erasure within each packet.

8. The method of claim 1, wherein said multimedia data has been encoded using Maximal Distance Separable (MDS) codes.

9. The method of claim 8, wherein said Maximal Distance Separable (MDS) codes are Reed-Solomon codes.

10. The method of claim 8, wherein said Maximal Distance Separable (MDS) codes are applied to a number, k, of information packets comprised of X data units, and wherein up to X codewords are formed of length n using one data unit from each of said k information packets.

11. The method of claim 8, wherein said Maximal Distance Separable (MDS) codes are applied to a number, k, of information packets comprised of X data units, and wherein up to X/L codewords of length nL are formed using L data units from each of said k information packets.

12. The method of claim 8, wherein a first set of said Maximal Distance Separable (MDS) codes are applied to each of said information packets comprised of X data units to create k information packets comprised of X' data units, and a second set of said MDS codes are applied to of said information packets comprised of X' data units, and wherein up to X' codewords are formed using one data unit from each of said k information packets.

13. The method of claim 1, wherein said error information includes a reformatted packet including frame error information from a lower layer.

14. The method of claim 13, further comprising the step of forwarding said reformatted packet to the FEC decoder if a cyclic redundancy check (CRC) on a packet header is valid.

15. The method of claim 1, wherein said UDP layer further specifies additional packet handling procedures in accordance with a complete User Datagram Protocol (CUDP).

16. A method for receiving multimedia data in a wireless packet network comprising the steps of:

processing said multimedia data to determine if said multimedia data is properly received; and

forwarding error information with said multimedia data to a higher layer.

17. The method of claim 16, wherein said error information comprises a set of logical transmission unit (LTU) error indicators associated with each packet.

18. The method of claim 17, wherein said error indicators point to a starting and ending location of erroneous data.

19. The method of claim 16, further comprising the step of performing a packet header cyclic redundancy check (CRC).

20. The method of claim 16, wherein said multimedia data has been encoded using Maximal Distance Separable (MDS) codes.

21. The method of claim 16, wherein said error information includes a reformatted packet including frame error information from a lower layer.

22. The method of claim 21, further comprising the step of forwarding said reformatted packet to an FEC decoder if a cyclic redundancy check (CRC) on a packet header is valid.

23. The method of claim 16, wherein said UDP layer further specifies additional packet handling procedures in accordance with a complete User Datagram Protocol (CUDP).

24. A system for processing multimedia data in a User Datagram Protocol (UDP) layer of a wireless receiver conforming to an Internet Protocol (IP) standard, said system comprising:

a memory for storing computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

receive error information with said multimedia data from a Radio Link Protocol (RLP) layer; and

forward said error information with said multimedia data to a higher layer.

25. The system of claim 24, wherein said error information comprises a set of logical transmission unit (LTU) error indicators associated with each packet.

26. The system of claim 25, wherein said error indicators point to a starting and ending location of erroneous data.

27. The system of claim 24, wherein said processor is further configured to perform a packet header cyclic redundancy check (CRC).

28. The system of claim 27, wherein said processor is further configured to forward said error indicator, logical transmission unit (LTU) size and a packet payload to the FEC decoder if said packet header is valid.

29. The system of claim 27, wherein said processor is further configured to forward said error indicator and a packet payload to the FEC decoder if said packet header is valid.

30. The system of claim 24, wherein said processor is further configured to process said error information to identify an erasure within each packet.

31. The system of claim 24, wherein said multimedia data has been encoded using Maximal Distance Separable (MDS) codes.

32. The system of claim 31, wherein said Maximal Distance Separable (MDS) codes are Reed-Solomon codes.

33. The system of claim 31, wherein said Maximal Distance Separable (MDS) codes are applied to a number, k, of information packets comprised of X data units, and wherein up to X code words are formed of length n using one data unit from each of said k information packets.

34. The system of claim 31, wherein said Maximal Distance Separable (MDS) codes are applied to a number, k, of information packets comprised of X data units, and wherein up to X/L code words of length nL are formed using L data units from each of said k information packets.

35. The system of claim 31, wherein a first set of said Maximal Distance Separable (MDS) codes are applied to each of said information packets comprised of X data units to create k information packets comprised of X' data units, and a second set of said MDS codes are applied to of said information packets comprised of X' data units, and wherein up to X' code words are formed using one data unit from each of said k information packets.

36. The system of claim 24, wherein said error information includes a reformatted packet including frame error information from a lower layer.

37. The system of claim 36, wherein said processor is further configured to forward said reformatted packet to the FEC decoder if a cyclic redundancy check (CRC) on a packet header is valid.

38. A system for receiving multimedia data in a wireless packet network comprising:

a memory for storing computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

process said multimedia data to determine if said multimedia data is properly received; and

forward error information with said multimedia data to a higher layer.

39. The system of claim 38, wherein said error information comprises a set of logical transmission unit (LTU) error indicators associated with each packet.

40. The system of claim 39, wherein said error indicators point to a starting and ending location of erroneous data.

41. The system of claim 38, wherein said processor is further configured to perform a packet header cyclic redundancy check (CRC).

42. The system of claim 38, wherein said multimedia data has been encoded using Maximal Distance Separable (MDS) codes.

43. The system of claim 38, wherein said error information includes a reformatted packet including frame error information from a lower layer.

44. The system of claim 43, wherein said processor is further configured to forward said reformatted packet to an FEC decoder if a cyclic redundancy check (CRC) on a packet header is valid.

45. A method for transmitting a multimedia packet from a wireless packet network to a wired network conforming to the Internet Protocol (IP), said multimedia packets encoded using a forward error correction (FEC) coding technique, said method comprising the steps of:

embedding frame error information in said multimedia packet;

forwarding said multimedia packet to a receiver on said wired network; and

discarding a multimedia packet having an unrecoverable frame error.

46. The method of claim 45, wherein said forward error correction (FEC) coding technique employs Maximal Distance Separable (MDS) codes that are applied to a number, k, of information packets comprised of X data units, and wherein up to X codewords are formed of length n using one data unit from each of said k information packets.

47. The method of claim 45, wherein said forward error correction (FEC) coding technique employs Maximal Distance Separable (MDS) codes that are applied to a number, k, of information packets comprised of X data units, and wherein up to X/L codewords of length nL are formed using L data units from each of said k information packets.

48. The method of claim 45, wherein said forward error correction (FEC) coding technique employs Maximal Distance Separable (MDS) codes that are applied to each of said information packets comprised of X data units to create k information packets comprised of X' data units, and a second set of said MDS codes are applied to of said information packets comprised of X' data units, and wherein up to X' codewords are formed using one data unit from each of said k information packets.

49. A method for transmitting a multimedia packet from a wireless packet network to a wired network conforming to the Internet Protocol (IP), said multimedia packets

encoded using a forward error correction (FEC) coding technique, said method comprising the steps of:

decoding said multimedia packet using frame error information;

forwarding said multimedia packet to a receiver on said wired network; and

discarding a multimedia packet having an unrecoverable frame error.

50. The method of claim 49, wherein said forward error correction (FEC) coding technique employs Maximal Distance Separable (MDS) codes that are applied to a number, k, of information packets comprised of X data units, and wherein up to X codewords are formed of length n using one data unit from each of said k information packets.

51. The method of claim 49, wherein said forward error correction (FEC) coding technique employs Maximal Distance Separable (MDS) codes that are applied to a number, k, of information packets comprised of X data units, and wherein up to X/L codewords of length nL are formed using L data units from each of said k information packets.

52. The method of claim 49, wherein said forward error correction (FEC) coding technique employs Maximal Distance Separable (MDS) codes that are applied to each of said information packets comprised of X data units to create k information packets comprised of X' data units, and a second set of said MDS codes are applied to of said information packets comprised of X' data units, and wherein up to X' codewords are formed using one data unit from each of said k information packets.

53. A system for transmitting a multimedia packet from a wireless packet network to a wired network conforming to the Internet Protocol (IP), said multimedia packets encoded using a forward error correction (FEC) coding technique, comprising:

a memory for storing computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

embed frame error information in said multimedia packet;

forward said multimedia packet to a receiver on said wired network; and

discard a multimedia packet having an unrecoverable frame error.

54. A system for transmitting a multimedia packet from a wireless packet network to a wired network conforming to the Internet Protocol (IP), said multimedia packets encoded using a forward error correction (FEC) coding technique, comprising:

a memory for storing computer readable code; and

a processor operatively coupled to said memory, said processor configured to:

decode said multimedia packet using frame error information;

forward said multimedia packet to a receiver on said wired network; and

discard a multimedia packet having an unrecoverable frame error.